

*Sub J2*

*C8*

## ABSTRACT OF THE DISCLOSURE

An apparatus for treating tumors utilizing an electric field in which a voltage generator generates brief voltage pulses applied to electrodes connected to a measurement unit. The electrodes are secured at a restricted region of a human or an animal and form electric fields in the tissue between the electrodes. The measurement unit determines the impedance between the electrodes which is substantially determined by the electric properties of the tissue between the electrodes. A registration and calculator device forms a control unit which, based on the impedance determined by the measurement unit, controls the output voltage of the voltage generator such that the electric field which is formed in the tissue has a constant predetermined value and realizes a peroration of cell membranes in the tissue which permits passage of treatment substances fed to the patient.